

TEHAMA COUNTY
AIR POLLUTION CONTROL DISTRICT
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PROPOSED TITLE V OPERATING PERMIT

ISSUED TO:
Tehama County/City of Red Bluff Landfill
Management Agency
19995 Plymire Road
Red Bluff, CA 96080

PLANT SITE LOCATION:
Tehama County/City of Red Bluff Landfill
Management Agency
UTM Zone 10: East 560.151, North
4,449.670

ISSUED BY:

Alan Abbs, Air Pollution Control Officer

Date

PROPOSED October 1, 2008

EFFECTIVE October 1, 2008

EXPIRATION September 30, 2013

NATURE OF BUSINESS: Municipal Solid Waste Landfill
APPLICATION COMPLETENESS DATE: 12/26/2005
SIC CODE: 4953

Responsible Official:
Name: Allan Abbs
Title: Solid Waste Director
Address: Tehama County/City of Red Bluff
Landfill Management Agency
19995 Plymire Road
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Phone: 530-528-1103

Site Contact Person:
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Title: Solid Waste Director
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FACILITY DESCRIPTION, EMISSION UNITS AND EQUIPMENT LISTS:

A. FACILITY DESCRIPTION

The Tehama County/City of Red Bluff Landfill Management Agency is a Municipal Solid Waste (MSW) Landfill permitted by the California Integrated Waste Management Board to receive a maximum of 400 tons per day of MSW. This landfill has been accepting waste since the site opened in 1964, originally as a burn dump.

On June 24, 2002 the landfill applied for an Authority to Construct (ATC) to install an enclosed flare and a landfill gas collection system. ATC #239-001 was issued June 28, 2002 and the system was installed and source tested. Permit to Operate (PTO) #239 was issued on August 25, 2003. The flare and gas collection system were designed to comply with the requirements of 40 CFR 60 subpart WWW, Standards of Performance for Municipal Solid Waste Landfills. The ATC and the PTO were written and issued to assure compliance with those same requirements. The landfill gas is combusted in the LFG&E model Triton 500 flare.

On June 20, 2005 the landfill received a permit from the California Integrated Waste Management Board to expand the design capacity of the facility from 2,633,000 cubic yards (Phase I) to 5,097,000 cubic yards (design capacity of Phase II is 2,464,000 cubic yards). Due to the expansion of the facility to a design capacity greater than 2.5 million cubic meters, the Tehama County/City of Red Bluff Landfill is subject to Title V permitting per District Rule: 4:33 Municipal Solid Waste Landfills. Rule 4:33 was adopted June 3, 1997 to control emissions from existing MSW Landfills as required by 40 CFR 60, Subpart WWW and Subpart Cc. Rule 4:33 adopted by reference the standards established in the New Source Performance Standards for Municipal Solid Waste Landfills (40 CFR 60, Subpart WWW).

Equipment Description

The Tehama County/City of Red Bluff Landfill is a Municipal Solid Waste Landfill consisting of:

1. 159.6 acre landfill site of which 53.6 acres are permitted for waste disposal.
2. Landfill gas collection system, vertical wells, lateral collector pipes, header pipe and gas movers to collect and route landfill gas to the landfill gas destruction system.
3. Landfill gas destruction system, LFG&E International model Triton 500 enclosed ground flare, rated at 14 MMBtu/Hr maximum heat rate.

B. Insignificant Emissions Units

1. The equipment items listed in Table 1 do not require an operating permit pursuant to Tehama County Air Pollution Control District (APCD) Rule 7:1 Federal Operating Permit Program regulation. They do not have actual emissions above de minimus threshold levels and are hereby listed as insignificant emissions units. The equipment listed in Table 1 may be supplemented, replaced or modified

without notice provided the operating status has not changed as defined in current district or federal rules and regulations. However, insignificant emissions units shall comply at all times with the generally applicable requirements identified in Conditions #34. through #46. of this permit.

Table 1. Insignificant Emission Units (full list)

Description	Capacity	Deminimus Emissions
Methane Gas Condensate Tank fixed roof, 6,000 gallon per year throughput	3,000 gallon HDPE tank	In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.
Used Oil Receptor Tank fixed roof, 3,605 gallon per year throughput	1,050 gallon steel tank	In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.
Used Motor Oil Tank fixed roof, 8,210 gallon per year throughput	360 gallon steel tank	In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.
Lube Rack Oil Tank above ground, 520 gallon per year throughput	200 gallon concrete shell steel tank	In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.
Diesel Storage Tank #1 fixed roof, 15,000 gallon per year throughput	2,000 gallon steel tank	In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.
Diesel Storage Tank #2 fixed roof, 15,000 gallon per year throughput	2,000 gallon steel tank	In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.

Diesel Storage Tank #3 fixed roof, double-walled, 15,000 gallon per year throughput	8,000 gallon steel tank	In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.
Leachate Tank #1 fixed roof, 14,000 gallon per year throughput	10,000 gallon HDPE tank	In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.
Leachate Tank #2 fixed roof, 14,000 gallon per year throughput	10,000 gallon HDPE tank	In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.
Hazardous Waste Recycling Facility The facility accepts and recycles flammable and poisonous materials, used motor oil, paint, antifreeze, acids, bases, car and household batteries, and compressed gas cylinders.	Per year, the facility accepts approximately 49 tons of oil and oil filters, 4 tons of latex paint, 0.6 tons of antifreeze, 11 tons of household and car batteries, 14 tons of flammable and poisonous materials, 0.2 tons of acids, 0.02 tons of bases and 1.25 tons of compressed gas cylinders.	In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.

<p>Green Waste/Wood Waste Facility and Inert Construction and Demolition Material</p> <p>Facility accepts green waste material (grass clippings, brush, etc.) and woody material (logs, construction lumber, etc.) which is chipped, stored and transported offsite bi-annually. Inert construction and demolition material is placed in the landfill.</p>	<p>Per year, facility accepts approximately 1,557 tons of green waste and 4,527 tons of inert construction and demolition material.</p>	<p>In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.</p>
<p>Scrap Metal Facility</p> <p>Facility accepts scrap metal and white goods (washing machines, dryers, water heaters, refrigerators). The scrap metal and white goods are stored on site until the materials can be transported to the proper recycling facilities.</p>	<p>Per year, facility accepts approximately 1,414 tons per year.</p>	<p>In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.</p>
<p>Electronic Scrap Materials Facility</p> <p>Facility accepts televisions, computer monitors and miscellaneous electronics which is stored on site until it can be transported to the proper recycling facility.</p>	<p>45 tons of electronic scrap is processed each year.</p>	<p>In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.</p>
<p>Materials Recycling Facility</p> <p>Facility accepts and stores curbside recycling material (aluminum cans, glass bottles, cardboard, paper, plastics, etc.). Facility includes a picking line to sort recyclable material and a bailer and conveyor belt for bailing recyclables for transport. Recyclables are stored on site until they can be transported to the proper facilities.</p>	<p>Per year, facility accepts approximately 1,500 tons of recyclables.</p>	<p>In every 12 month period, actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants.</p>

Earth Mover/Scraper, Compactor, Backhoe, Dozer, Water Truck, Pick-up Trucks	Regulated under the California Air Resources Board Diesel Emissions Reduction Plan.	Vehicles are exempt from District permitting under District Rule 2:4
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Table 2. Insignificant Emission Units Control Equipment/Work Practice List

Unit Description	Control / Work Practice Requirements
Hazardous Waste Recycling Facility	All hazardous waste is bulked and sealed in containers by a qualified technician and then sent to a proper disposal site.
Green Waste Facility	Facility housekeeping is performed daily to minimize any fugitive dust emissions.
Fugitive dust emissions: Unpaved roadways, equipment storage, and facility maintenance.	Fugitive emissions control practices: Slower driving speeds, watering, palliative dust agents, chip sealing, or paving.

B. Significant Emissions Unit(s)

Table 3. Lists the single significant permitted source at Tehama County/City of Red Bluff Landfill

Table 3 Significant Emissions Unit Information

Source #	District Permit #	Description	Model	Capacity
1	PTO #239	LFG&E International enclosed flare with minimum heat input of 1.4 MMBtu/Hr and maximum heat input of 14 MMBtu/Hr. Flare is equipped with two (2) variable airflow 15 horsepower blowers that maintain a landfill gas flow rate to the flare of 75 to 500 standard cubic feet per minute (scfm). Maximum exhaust flow rate from the flare is 10,500 scfm. The flare exhaust stack is 28 feet high and 63 inches in diameter.	Triton 500	14 MMBtu/Hr maximum heat input

ADMINISTRATIVE REQUIREMENTS AND CONDITIONS

A. Permit Term and Renewal

1. This Title V Operating Permit shall be valid for a term of five years from the date of issuance. [District Rule 7:1.6.1.1.15.1, 40 CFR §70.6(a)(2)]
2. The permittee shall submit a standard District application for renewal of this Title V Operating Permit to the permitting authority (Air Pollution Control Officer), no earlier than eighteen (18) months and no later than six (6) months before the expiration date of the current permit. Permits to operate for all emissions units at a stationary source shall undergo simultaneous review. [District Rule 7:1.4.2.2.1, 40 CFR §70.5(a)(1)(iii)]
3. Provided a complete and timely application has been submitted, this permit shall not expire until the renewal permit has been issued or denied, and any permit shield contained herein pursuant to 40 CFR §70.6(f) shall extend beyond the original permit term until the renewal permit has been issued or denied. [40 CFR §70.4(b)(10)]

B. Permit Reopening and Revision

For any correction or amendment to this permit, or for any change to the facility or its operation which requires an amendment to this permit, the permittee shall comply with District Rule 7:1 Section 4. Administrative Procedure for Sources, and Regulation II - Permit and Registration in accordance with the applicable State Implementation Plan (SIP) approved rules listed below:

Rule 2:1 General Requirements

1. No person shall cause or permit the construction or modification of any new source without first obtaining an authority to construct or modify from the Air Pollution Control Officer as to the location and design of such new source to comply with applicable rules and regulations and ambient air quality standards.
2. The Air Pollution Control Officer shall not approve such construction or modification unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that the new source can be expected to comply with all applicable federal, state, and local regulations.
 - 2.1 The Air Pollution Control Officer will provide permit applicants with a list of information and criteria he deems necessary for proper evaluation of the application. Within 30 days after receiving an application, the Air Pollution Officer will advise the applicant whether the application is complete. If deemed incomplete, the applicant will be apprized of the additional information necessary. A new 30 day review period will be established on receipt of the revised application. If no action is taken within either of these 30 day periods, the applicant may deem the application complete.

- 2.2 After determining that an application is complete, the Air Pollution Control Officer may ask the applicant to clarify, supplement, or expand upon any information required in the list of criteria. However, the Air Pollution Control Officer may not require information not cited in the list of criteria.
- 2.3 The Air Pollution Control Officer must act on the application within 180 days after the applicant has been notified that the application is complete, or within 180 days after the lead agency has approved the project, whichever is later. If the Air Pollution Officer does not take action to approve or disapprove the application during that period of time, the permit may be deemed granted by operation of law. [District Rule 2:1, SIP Approved on 04/12/82 47 FR 15586]

Rule 2:2 Permits Required

1. Authority to Construct: Any person building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, shall first obtain written authorization for such construction from the Air Pollution Control Officer. An authority to construct shall remain in effect until the permit to operate the equipment for which the application was filed is granted or denied or the application is canceled.
2. Permit to Operate: Before any article, machine, equipment or other contrivance described in Rule 2:2.1 may be operated or used, a written permit shall be obtained from the Air Pollution Control Officer. No permit to operate or use shall be granted either by the Air Pollution Control Officer or the Hearing Board for any article, machine, equipment or contrivance described in Rule 2:2.1, constructed or installed without authorization as required by Rule 2:2.1, until the information required pursuant to these Rules and Regulations is presented to the Air Pollution Control Officer and such article, machine, equipment or contrivance is altered, if necessary, and made to conform to the standards set forth in Rule 2:5 and elsewhere in these Rules and Regulations. [District Rule 2:2, SIP Approved on 05/31/72 37 FR 10856]

C. Permit Shield

1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements, and subsumed requirements incorporated into this permit, as of the date of permit issuance. [40 CFR §70.6(f)]
- 2.. The permit shield provisions of 40 CFR §70.6(f) are hereby extended to all equipment listed in Tables 1, 2, and 3 of this permit, and to all terms and

conditions and applicable requirements listed in this permit under each operating scenario. [District Rule 7:1.4.1.3, 40 CFR §70.6(a)(9)(ii), 40 CFR §70.6(f)]

3. The permit shield provisions shall apply to any permit amendments issued as a final action by the APCO. [District Rule 7:1.4.1.2, 40 CFR §70.7(d)(4)]
4. The permit shield provisions shall apply upon final action taken by the APCO granting a request for an administrative permit amendment. [40 CFR §70.7(d)(4)]
5. The permit shield under §70.6(f) of this part shall not extend to minor permit modifications. [District Rule 7:1.4.1.4, 40 CFR §70.7(e)(2)(vi)]

TITLE VI PROVISIONS

A. Stratospheric Ozone Protection

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.
 - b. Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR §82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR §82.166. ("MVAC-like appliance" as defined in §82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §82.156
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166
2. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
3. If the permittee performs a service on motor (fleet) vehicles when the service involves ozone-depleting substance refrigerant (or a regulated substitute substance) in the motor

vehicle air conditioner, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

4. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program.

FEDERALLY ENFORCEABLE EMISSION LIMITS AND STANDARDS

(All conditions are federally enforceable unless otherwise noted)

1. The heat input rate to the flare shall not exceed 14 MMBtu/Hr. The LFG&E International flare may be operated on extracted landfill gas, a combination of landfill gas and propane, or landfill gas and natural gas from the local pipeline. [District Rule 2:3.A and ATC 753-239 condition 24]
2. Emissions from the flare shall not exceed the following limits: [District Rule 2:3.A and ATC 753-239 condition 19]

<u>Pollutant</u>	<u>Emission Level</u>
NOx	0.0744 lb/MMBtu
CO	1.4880 lb/MMBtu
VOC	0.0744 lb/MMBtu

3. The flare combustion temperature shall be maintained at 1400°F or greater within 30 minutes of start-up. [District Rule 2:3.A and ATC 753-239 condition 24]
4. Pursuant to 40 CFR Part 60 §60.18(c)(1) the landfill gas flare shall be designed for and operated with no visible emissions except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. Good operating practices shall be used to the fullest extent during start-up and shut-down periods to minimize pollutant and visible emissions. [40 CFR 60.18(c)(1) and ATC 753-239 condition 32]
5. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three (3) minutes in any one (1) hour which is as dark or darker than Ringelmann 1 or equivalent to 20% opacity. [District Rule 4:1 and ATC 753-239 condition 10]
6. Particulate matter shall not exceed 0.15 grains per dry standard cubic foot (dscf) in the exhaust stream of the enclosed ground flare. [District Rule 4:3]
7. Sulfur compounds calculated as sulfur dioxide (SO₂) shall not exceed 250 ppm in the exhaust stream of the enclosed ground flare. [District Rule 4:9]
8. Emissions of sulfur compounds calculated as hydrogen sulfide (HS) shall not exceed 50 lb/day. [District Rule 2:3.A and ATC 753-239 condition 19]

9. The Tehama County/City of Red Bluff Landfill Management Agency shall limit emissions of volatile organic compounds by the use of architectural coatings which comply with the requirements of District Rule 4:39. [District Rule 4:39, Not Federally Enforceable]
10. The Tehama County/City of Red Bluff Landfill Management Agency submitted to the District a collection and control system design plan prepared by a professional engineer along with an application for an Authority to Construct on June 24, 2002. This plan met the requirements specified in 40 CFR 60.752(b)(2)(ii) and (iii) [restated in condition 12] and includes the information required by 40 CFR 60.752(b)(2)(I). [District Rule 4:33 and 40 CFR 60.752(b)(2)]

The system was installed prior to triggering the need for a Title V permit and has been in operation since 2002. The system shall be continuously maintained and operated in compliance with all applicable federal, state and local rules and regulations required by this Permit to Operate.

11. The landfill gas collection and control system shall be subject to all applicable terms and conditions of District Rule 2:3A New Source Review. [ATC 753-239 condition 19]
12. No later than 30 months after the first report required by Condition 30 in which the NMOC emission rate equals or exceeds 50 megagrams per year, the Tehama County/City of Red Bluff Landfill shall cause to be operated a landfill gas collection system that effectively captures the gas generated such that [District Rule 4:33, ATC condition 25. and 40 CFR 60.752(b)(2)]:
 - a. the system is designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas collection system; either of the variable airflow 15 horsepower blower(s) shall maintain a sufficient extraction rate to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions for the life of the blower; and
 - b. landfill gas is collected from each area, cell or group of cells in which non-asbestos degradable solid waste has been placed for a period of five (5) years or more for active areas or two (2) years or more for closed areas; and
 - c. offsite migration of subsurface gas is minimized; and
 - d. each wellhead is under negative pressure except under the following conditions:
 - i. a fire or increased well temperature; or
 - ii. use of a geomembrane or synthetic cover; or
 - iii. a decommissioned well.

- e. the collected landfill gas temperature is less than 55°C at each operating well with a nitrogen level less than or equal to 50 percent or an oxygen level less than or equal to 12 percent; and
 - f. the methane concentration over the landfill shall not exceed 500 ppm above background at the surface of the landfill.
13. No later than thirty (30) months after the first report required by Condition 31 in which the NMOC emission rate equals or exceeds 50 megegrams per year, the enclosed ground flare shall either reduce Non-Methane Organic Compounds (NMOC) by 98 weight-percent or reduce the NMOC outlet concentration to less than 20 ppmv, dry basis as hexane at 3% oxygen. [District Rule 4:33 and 40 CFR 60.752(b)(2) and ATC 753-239 condition 20]
14. The Tehama County/City of Red Bluff Landfill shall cause the enclosed ground flare to be operated at all times that the collected landfill gas is routed to the system. Operation of the LFG&E International, model Triton 500 flare shall not exceed twenty-four hours per day (24 hr/dy), seven days per week 7 dy/wk) and fifty-two weeks per year (52 wks/yr) for a total of eight thousand seven hundred hours per year (8,760 hrs/yr). The landfill gas flare shall not emit greater than eighty percent (80%) of any air contaminates in excess of the threshold for a major source of regulated air pollutants, or a major source of hazardous air pollutants requiring a federal Title V Operating Permit pursuant to District Rule 7:1.[District Rule 4:33 and 40 CFR 60.753(f) and ATC 753-239 conditions 20, 21 and 34]
15. Conditions #13 and #14 do not apply to the enclosed ground flare during periods of start-up, shutdown or malfunction, provided that the duration of start-up, shutdown or malfunction shall not exceed one (1) hour. [District Rule 4:33 and 40 CFR 60.753(e)]
16. The Tehama County/City of Red Bluff Landfill Management Agency shall cause the enclosed ground flare to be equipped with exhaust gas temperature monitoring devices equipped with continuous recorders having an accuracy of $\pm 1\%$ of the temperature being measured expressed in degrees Celsius or $\pm 0.5^\circ\text{C}$, whichever is greater. [District Rule 4:33 and 40 CFR 60.756(b) and ATC 753-239 condition 22 a.]
17. The Tehama County/City of Red Bluff Landfill shall cause the operation of gas flow rate measuring device(s) that provide measurements of gas flow rate to the enclosed ground flare or to the bypass valves if so equipped. The flare gas flow rate measuring device shall record the gas flow to the flare at least once every fifteen (15) minutes. [District Rule 4:33 and 40 CFR 60.756 and ATC 753-239 condition 22 b.]
18. If the gas collection system is equipped with valves to bypass the enclosed ground flare, these bypass valves must be in a closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that gas flow is not diverted through the bypass line.[District Rule 4:33 and 40 CFR 60.756 and ATC 753-239 condition 22 b.]

TESTING REQUIREMENTS AND PROCEDURES

19. The Tehama County/City of Red Bluff Landfill Management Agency shall conduct an annual performance test to verify compliance with Conditions 2, 3, 7, 8 and 12. **To verify compliance with condition 6, a performance test for particulate matter shall be conducted once every 5 years. If test results show emissions exceeding 0.15 gr/dscf testing shall be conducted annually until at least two (2) successive annual tests show compliance. Then testing once every 5 years can resume.** The testing shall be conducted in accordance with the USEPA test methods indicated below, and the written results of the performance tests shall be provided to the District within forty-five (45) days after testing [40 CFR 60.8 and ATC 753-239 conditions 29 and 30].

Annual source testing shall be performed by an independent testing company. The independent test company shall submit a source test protocol to the District a minimum of thirty (30) days prior to the actual source test date. The independent test company shall receive written District approval of the protocol prior to conducting source testing. The District shall be notified a minimum of ten (10) days prior to the actual source test date so that District personnel may be present to observe source testing.

Within forty-five (45) days of completion of required source testing a final report shall be submitted to the District by the independent testing firm that shall list all performance test determinations of flue gas concentrations in appropriate units such as gr/dscf, ppmvd, lbs/MMBtu, or lbs/ft³. The appropriate reporting units shall be calculated for emissions of NO_x, CO, CO₂, and Total Hydrocarbons (as NMOC), and reported in pounds per hour (lbs/hr), pounds per day (lbs/day) and tons per year (tpy). The final report shall contain all calculations and shall specify the source of the emission rate. When reporting source test results each separate test run shall be listed in the final report and the test runs shall be averaged. The averaged test results shall then be compiled into a one page summary.

The annual performance tests shall be conducted at the maximum landfill gas flow rate. Compliance shall be determined using the following test methods:

- a. Sample and Traverse Velocity - USEPA Method 1
- b. Velocity and Volumetric Flow Rate - USEPA Method 2
- c. Stack Gas Oxygen (O₂) - USEPA Method 3 or 3A
- d. Carbon Dioxide (CO₂) - USEPA Method 3 or 3A
- e. Moisture Content - USEPA Method 4
- f. PM-10 - USEPA Method 5
- g. Sulfur Dioxide - USEPA Method 6
- h. Oxides of Nitrogen (NO_x) - USEPA Method 7 or 7E
- i. Carbon Monoxide (CO) - USEPA Method 3A or 10
- j. Total Hydrocarbons - Organic Gases as NMOC - USEPA Method 18 or 25A calculated as hexane at 3% oxygen, dry basis

Testing shall include, but not be limited to, the determination of the following parameters:
[District Rules 7:1 and 4:33]

- k. Oxides of Nitrogen as NO₂: lb/MMBtu, lb/MMcf, ppmv dry @ 3% O₂, and lbm/hr.

- l. Carbon Monoxide: lb/MMbtu, lb/MMcf, ppmv dry @ 3% O₂, and lbm/hr.
- m. Carbon Dioxide: lb/MMbtu, lb/MMcf, ppmv dry @ 3% O₂, and lbm/hr.
- n. Oxides of Sulfur as SO₂: percentage by volume.
- o. Total Hydrocarbons (THC) destruction efficiency.

and the following process parameters:

- p. Landfill gas flow rate to flare: dscfm
- q. Landfill gas heating value: Btu/scf
- r. Landfill gas concentration of total Sulfur as Hydrogen Sulfide: lb/day
- s. Flare exhaust stack gas temperature: degrees Fahrenheit
- t. Flare exhaust stack gas flow rate: dscfm

where lb/MMBtu = pounds per Million British thermal units

lb/MMcf = pounds per Million cubic feet

ppmv = parts per million volume

lbm/hr = pounds mass per hour

dscfm = dry standard cubic feet per minute

Btu/scf = British thermal units per standard cubic foot

scf = standard cubic feet per minute

lb/day = pounds per day

- 20. No later than thirty (30) months after the first report required by Condition #30 in which the NMOC emission rate equals or exceeds fifty (50) megagrams, the Tehama County/City of Red Bluff Landfill Management Agency shall cause monitoring or testing to be conducted to verify compliance with Conditions 11 and 17 as follows: [District Rule 4:33 and 40 CFR 60.756(a) and (b)]

on a monthly basis:

- a. Visually inspect the bypass valves to ensure that they are closed and that landfill gas is not diverted through the bypass line. Measure the gauge pressure and monitor the temperature and nitrogen or oxygen content at each well head. The nitrogen level shall be determined using USEPA Method 3C, or the oxygen level shall be determined using USEPA Method 3A.

On a quarterly basis:

- b. Monitor the surface concentrations of methane along the entire perimeter of the collection area and along a serpentine pattern within the collection area at thirty (30) meter intervals. This surface monitoring shall be performed in accordance with section 4.3.1 of USEPA Method 21, except that the probe shall be placed within five (5) to ten (10) centimeters of the ground. The portable analyzer shall meet the instrument specifications provided in section 3 of USEPA Method 21 except that "methane" shall replace all references to VOC and the instrument evaluation procedures in section 4.4 of USEPA Method 21 shall be used to meet the performance evaluation requirements of section 3.1.3. The calibration procedures in section 4.1 of USEPA Method 21 shall be followed immediately

before commencing a surface monitoring survey, and the calibration gas shall be methane diluted to a nominal concentration of 500 ppm.

Any reading of 500 ppm or greater above background shall be recorded as a monitored exceedance. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least thirty (30) meters from the perimeter wells. A monitored exceedance is not a violation of the operational requirement contained in Condition 10(F) as long as the following specified actions are taken:

- i. The location of each monitored exceedance shall be marked and the location recorded.
- ii. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within ten (10) calendar days of detecting the exceedance; and
- iii. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within ten (10) days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in section v) of this Condition shall be taken.
- iv. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm above the background concentration at the 10-day re-monitoring specified in section ii) or iii) of this Condition shall be re-monitored one (1) month from the initial exceedance. If the one (1) month re-monitoring shows a concentration less than 500 ppm above background, no further monitoring is required until the next quarterly monitoring period. If the one (1) month re-monitoring shows an exceedance, the actions specified in sections iii) or v) of this Condition shall be taken.
- v. For any location where monitored methane concentration equals or exceeds 500 ppm above background three (3) times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance and a corresponding time line for installation may be submitted to the District for approval.

RECORD KEEPING REQUIREMENTS

21. The Tehama County/City of Red Bluff Landfill Management Agency shall maintain up-to-date records of the maximum design capacity, the current amount of solid waste in place, the year-by-year waste acceptance rate, and the nature, date of deposition, amount and location of asbestos-containing or nondegradable waste excluded from gas collection

- as provided by 40 CFR 60.759(a)(3)(I) as well as any nonproductive areas excluded from gas collection as provided by 40 CFR 60.759(a)(3)(ii). These records shall be retained on site or be available within four (4) hours if stored off site. [District Rule 4:33 and 40 CFR 60.759]
22. The Tehama County/City of Red Bluff Landfill Management Agency shall keep for at least 5 years up-to-date, readily accessible continuous records of all applicable recordkeeping requirements of 40 CFR 60.758, and the following data as measured during the initial performance test or compliance determination: [District Rule 4:33 and 40 CFR 60.757 and 40 CFR 60.758]
- a. The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1); and
 - b. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1).
23. The Tehama County/City of Red Bluff Landfill Management Agency shall keep for at least five (5) years up-to-date, readily accessible continuous records of all data required by Condition 20. [District Rule 4:33 and 40 CFR 60.758]
24. The Tehama County/City of Red Bluff Landfill Management Agency shall maintain the following general records of required monitoring information: [District Rule 7:1 and 40 CFR 70.6(a)(3)(C)(ii)]
- a. The date and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses;
 - f. The operating conditions existing at the time of sampling or measurement; and
 - g. The records of quality assurance for continuous monitoring systems (including, but not limited to quality control activities, audits, and calibration drift checks) and source testing methods.
25. The Tehama County/City of Red Bluff Landfill Management Agency shall maintain records on the occurrence and duration of any start-up, shutdown, or malfunction in the operation of the equipment under this permit. [District Rule 7:1 and 40 CFR 70.6(a)(3)(ii)]
26. The Tehama County/City of Red Bluff Landfill Management Agency shall retain records of all required monitoring data and support information for a period of at least five (5)

years from the date of the monitoring, sample collection, measurement, report, and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. [District Rule 7:1 and 40 CFR 70.6(a)(3)(ii)]

REPORTING REQUIREMENTS

27. The Tehama County/City of Red Bluff Landfill Management Agency shall report all breakdowns to the Air Pollution Control Officer (APCO) within one (1) hour of the occurrence. If the breakdown occurs when the APCO cannot be contacted, the report of the breakdown shall be made at the commencement of the next regular working day.

As soon as the occurrence has been corrected, but no later than ten (10) calendar days after correction, the owner or operator shall submit a written report to the APCO. This report shall include at a minimum: [District Rule 4:17, Not Federally Enforceable]

- a. A statement that the condition or failure has been corrected and the date of the correction; and
 - b. A description of the reasons for the occurrence; and
 - c. A description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future; and
 - d. An Estimate of the emissions caused by the condition or failure.
28. The Tehama County/City of Red Bluff Landfill Management Agency shall submit semiannual monitoring reports to the District, in a District approved format, no later than August 15 for the period of January 1 through June 30 and no later than February 15 for the period of July 1 through December 31. [District Rule 7:1 and 40 CFR 70.6(a)(3)(ii) and ATC 753-239 condition 37]

These monitoring reports shall include at a minimum:

- a. The time intervals, date and magnitude of excess emissions, nature and cause of the excess (if known), corrective actions and preventive measures adopted; and
 - b. The averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollution in question; and
 - c. All information pertaining to any monitoring as required by the permit; and
 - d. A negative declaration specifying when no excess emissions occurred.
29. The Tehama County/City of Red Bluff Landfill Management Agency shall submit an annual report due no later than 30 months after the first report required by Condition 30 in which the NMOC emission rate equals or exceeds 50 megagrams per year, with the

following required information: [District Rule 4:33 and 40 CFR 60.752 and 40 CFR 60.757(f) and (g)]

- a. The value and length of time for exceedances of applicable parameters monitored as required in Condition 12; and
- b. A description and the duration of all periods when the gas stream is diverted from the enclosed ground flare; and
- c. A description and the duration of all periods when the enclosed ground flare was not operating for any period exceeding one (1) hour and the length of time the enclosed ground flare was not operating; and
- d. All periods when the enclosed ground flare was not operating in excess of five (5) days; and
- e. The location and concentration of each exceedance of Condition 12(f) as monitored by Condition 20(b); and
- f. The date of installation and the location of each well or collection system expansion added pursuant to Condition 20(b)(v).

In addition to the above, the initial report shall include:

- g. The performance test required under Condition 19; and
- h. A diagram of the collection systems showing collection systems positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion; and
- i. The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based; and
- j. The documentation of the presence of asbestos or non-degradable material for each area from which collection wells have been excluded based on the presence of asbestos or non- degradable material; and
- k. The sum of gas generation flow rates for all areas from which collection wells have been excluded based on non-productivity and the calculation of gas generation flow for each excluded area; and
- l. The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
- m. The provisions for the control of off-site migration.

30. The Tehama County/City of Red Bluff Landfill Management Agency shall submit an annual compliance certification report to the District and USEPA, in a District approved format, no later than February 15 for the period of January 1 through December 31 of the preceding year. [District Rule 7:1 and 40 CFR 70.6(c)(5)(iii)]

This report shall include a written statement from the responsible official which certifies the truth, accuracy and completeness of the report and shall include at a minimum:

- a. Identification of each term or condition of the permit that is the basis of the certification; and
 - b. The compliance status; and
 - c. Whether compliance was continuous or intermittent; and
 - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period.
31. The Tehama County/City of Red Bluff Landfill Management Agency shall submit an annual emission report to the District as specified in 40 CFR 60.752(b)(1)(ii) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed. [District Rule 4:33 and 40 CFR 60.752]
32. The Tehama County/City of Red Bluff Landfill Management Agency shall submit a closure report to the District within 30 days of waste acceptance cessation. If a closure report has been submitted to the District, no additional wastes may be placed into the landfill without filing a notification of modification as described in 40 CFR 60.7(a)(4). [District Rule 4:33 and 40 CFR 60.757]
33. The Tehama County/City of Red Bluff Landfill Management Agency shall submit an equipment removal report to the District 30 days prior to removal or cessation of operation of the landfill gas control equipment. The equipment removal report shall contain the following: [District Rule 4:33 and 40 CFR 60.757]
- a. A copy of the closure report submitted in accordance with Condition 32; and
 - b. A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
 - c. Dated copies of three successive annual NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.
34. By February 15th of each year, the permitted source owner or operator shall submit a chronological report, by month, that is summarized into an annual report for the previous operating year. [40 CFR 60.757(f) and ATC 753-239 condition 38]

- a. The amount of landfill gas combusted in the LFG&E International flare. The report shall be in cubic feet.
- b. Hours of operation of the LFG&E International flare.
- c. The amount of NO_x, CO, CO₂, and Total Hydrocarbons (as NMOC) emitted during combustion of landfill gas.
- d. Notification of all dates and duration of time, as well as the estimated amount of landfill gas that has bypassed the LFG&E International flare. This includes an estimate of NMOC emitted during periods that the landfill gas was routed through the bypass line.

GENERAL CONDITIONS

- 35. The Tehama County/City of Red Bluff Landfill Management Agency shall comply with all conditions of this federal operating permit. Any noncompliance with a permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [District Rule 7:1 and 40 CFR 70.6(a)(6)(i)]
- 36. In an enforcement action, the fact that the Tehama County/City of Red Bluff Landfill Management Agency would have to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit is not a defense. [District Rule 7:1 and 40 CFR 70.6(a)(6)(ii)]
- 37. This permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by the District. The filing of a request by the Tehama County/City of Red Bluff Landfill Management Agency for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 7:1 and 40 CFR 70.6(a)(6)(iii)]
- 38. Fugitive dust emissions generated from access roads, internal driveways, yards and stockpiles, equipment use areas, parking areas, etc., shall be controlled at all times by the use of dust suppression techniques that may include but are not limited to the following methods [ATC condition 17.]:
 - a. Reduced driving speeds;
 - b. Watering;
 - c. Palliative dust agents;
 - d. Paving and/or chipsealing.
- 39. Repairs or replacement of any part of the active gas collection system shall be performed pursuant to Code of Federal Regulations 40 CFR Part 60 Standards of Performance for New Stationary Sources and Guidelines for Control of Existing Sources. Municipal Solid

Waste Landfills: Subpart WWW and Cc §60.752 Standards for air emissions from municipal solid waste landfills.[40 CFR 60.752(b)and ATC 753-239 condition 13, 36]

The repaired active collection system shall:

- a. Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment.
- b. Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been in place for a period of;
 - i. 5 years or more if active; or
 - ii. 2 years or more if closed or at final grade;
 - iii. Collect gas at a sufficient extraction rate;
 - iv. Be designed to minimize off-site migration of subsurface gas;
 - v. Route all the collected gas through the gas collection system to the LFG&E International, model Triton 500 enclosed flare control system.

All equipment, including both process and air pollution control equipment, shall be maintained at regular intervals to ensure minimal discharge of emissions. Manufacturers' recommended maintenance procedures shall be adhered to at all times.

40. This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. [District Rule 7:1 and 40 CFR 70.6(a)(6)(iv)]
41. The Tehama County/City of Red Bluff Landfill Management Agency shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Tehama County/City of Red Bluff Landfill Management Agency shall also furnish to the District copies of records required to be retained by this permit. [District Rule 7:1 and 40 CFR 70.6(a)(6)(v)]
42. For applicable requirements that will become effective during the permit term, the Tehama County/City of Red Bluff Landfill Management Agency shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [District Rule 7:1 and 40 CFR 70.5(c)(8)(iii)(B)]
43. Any document submitted to the District pursuant to this permit shall contain certification by the responsible official of truth, accuracy and completeness. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete. The Tehama County/City of Red Bluff Landfill Management Agency shall promptly, upon discovery,

report to the District a material error or omission in these records, reports, plans or other documents. [District Rule 7:1 and 40 CFR 70.5(d)]

44. The Tehama County/City of Red Bluff Landfill Management Agency shall report any violation of any requirement contained in this permit to the District within 96 hours after such occurrence. The violation report shall include the time intervals, date and magnitude of excess emissions; nature and cause of the excess (if known), corrective actions and preventive measures adopted. [District Rule 7:1 and 40 CFR 70.6(a)(3)(iii)(B)]
45. Upon any administrative or judicial challenge, all emission limits, specific and general conditions, record keeping and reporting requirements of this permit, except those being challenged, remain valid and must be complied with. [District Rule 7:1 and 40 CFR 70.6(a)(5)]
46. For this federal operating permit to remain valid through the permit term of five (5) years from the date of issuance, the Tehama County/City of Red Bluff Landfill Management Agency shall pay an annual emission fee based upon the requirements of District Rule 7:1. [District Rule 7:1 and 40 CFR 70.6(a)(7)]
47. The Tehama County/City of Red Bluff Landfill Management Agency shall have available at the facility at all times a copy of this federal operating permit. [District Rule 7:1 and 40 CFR 70.6(c)(2)]
48. For protection from enforcement action based upon an emergency, as defined in District Rule 7:1, the responsible official for the Tehama County/City of Red Bluff Landfill Management Agency shall submit to the District within two weeks of an emergency event relevant evidence which demonstrates [District Rule 7:1 and 40 CFR 70.6(g)]
 - a. An emergency occurred; and
 - b. The Tehama County/City of Red Bluff Landfill Management Agency can identify the cause(s) of the emergency; and
 - c. The facility was being properly operated at the time of the emergency; and
 - d. All steps were taken to minimize the emissions resulting from the emergency; and
 - e. Within two (2) working days of the emergency event, the Tehama County/City of Red Bluff Landfill Management Agency provided the District with a description of the emergency and any mitigating or corrective actions taken.
49. Upon presentation of credentials, the Tehama County/City of Red Bluff Landfill Management Agency shall allow the District, the ARB, the USEPA, or an authorized representative, to perform the following: [District Rule 7:1 and 40 CFR 70.6(c)(2)]

- a. Enter upon the premises where the federal operating permit source is located or in which any records are required to be kept under the terms and conditions of this federal operating permit;
- b. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity;
- c. Inspection and duplication of records required by the permit to operate; and
- d. Source sampling and other monitoring activities.

INDEMNIFICATION

50. District Rule 2:19 District Indemnification applies to this permit. [District Rule 2:19, ATC 753-239]